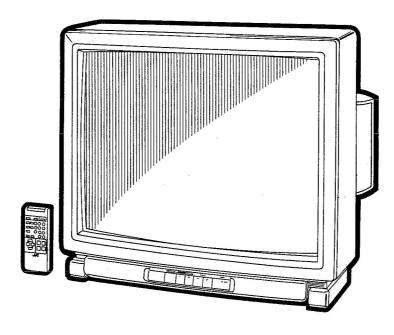
# **INSTRUCTIONS**

# AV-2750S/AV-2760S

**COLOR MONITOR/RECEIVER** 



### For Customer Use:

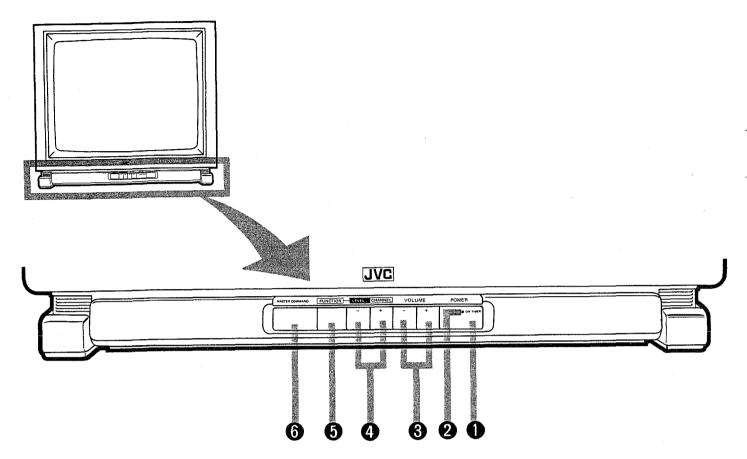
Enter below the Model No. and Serial No. which are located on the rear of the cabinet. formation for future

Model No.

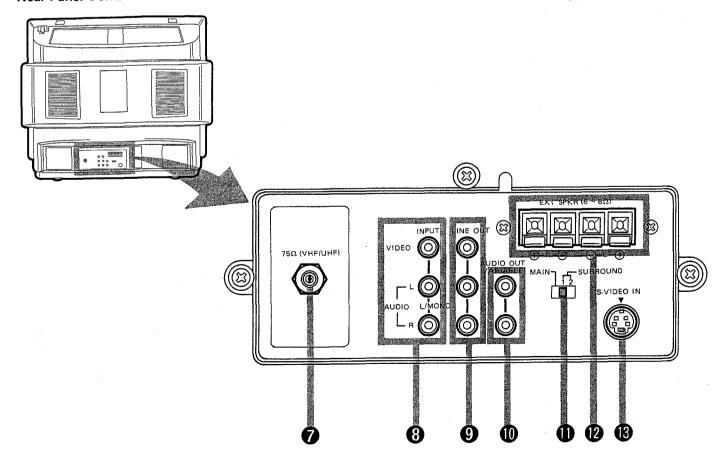
Serial No.

# CONTROLS AND THEIR LOCATIONS

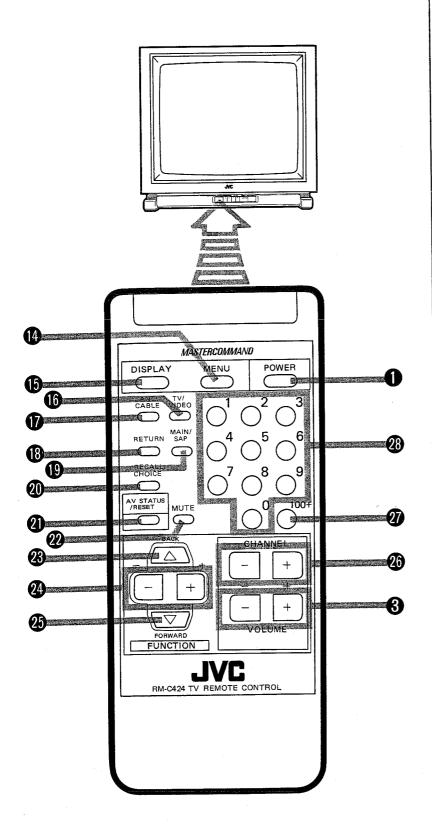
# Front Panel Control Section



# **Rear Panel Control Section**



## **Remote Control Section**



### **Front Panel Control Section**

- POWER button
- POWER/ON TIMER indicator
- **3** VOLUME (-/+) buttons
- 4 LEVEL/CHANNEL (-/+) buttons
- **5** FUNCTION button
- 6 Remote Control sensor

### **Rear Panel Control Section**

- Antenna terminal
- VIDEO/AUDIO INPUT connectors
- LINE OUT connectors
- MAUDIO OUT (VARIABLE) connectors
- **1** EXT SPKR switch
- **(2)** EXT SPKR terminals
- B S-VIDEO IN connector

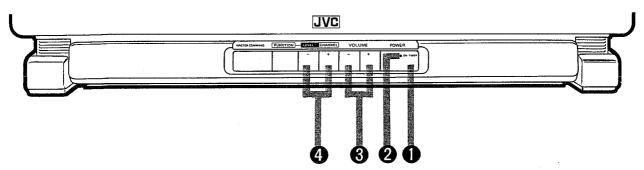
### **Remote Control Section**

- MENU button
- 1 DISPLAY button
- TV/VIDEO button
- ANT/CABLE button
- **®** RETURN button
- MAIN/SAP button
- @ RECALL CHOICE button
- 2 AV STATUS/RESET button
- 2 MUTE button
- FUNCTION BACK button
- 2 FUNCTION (-/+) buttons
- 1 FUNCTION FORWARD button
- ② CHANNEL (-/+) buttons
- 7 100+ button
- 23 10-Digit Keypad
- \*Buttons ① and ③ on the Remote Control have the same functions as those of buttons ① and ③ on the front panel control section.

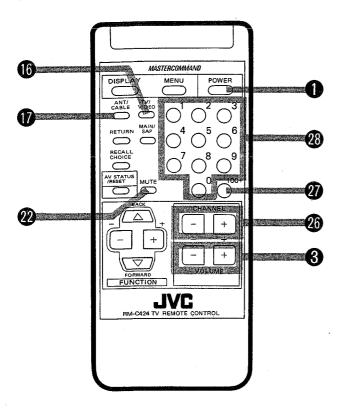
<sup>\*</sup>Please refer to the above numbers on the following pages.

# TV OPERATION

### Front Panel



### Remote Control



# **First Preparations**

- Connect either Antenna or Cable TV by following "Installation" instructions on page 3.
- Insert batteries into the Remote Control unit by following "Remote Control Use" instructions on page 3.
- Connect the power cord to 120 V, 60 Hz AC outlet. The power cord is supplied with a polarized plug. Therefore, it will only insert one way into the wall outlet. DO NOT DEFEAT THE POLARIZED PLUG. If you have difficulty, consult your local dealer.

### CABLE TV CHANNEL CONVERSION CHART

In addition to normal TV reception from an antenna for VHF (Channels 2-13) and UHF (Channels 14-69), your TV set is equipped to receive non-scrambled cable TV channels. Sub-Mid band (A-8, A-4 - A-1), Mid band (A—I), Super band

(J-W), Hyper band (W+1-W+28) and Ultra band (W+29-W+84) can be received by using the channel selections as shown in the following chart.

	A-8	A-4	A-3	A-2	A-1	Α	В	С	D	E	F	G	Н	1	J	K	Ĺ	M	N
**	01	96	97	98	99	14	15	16	1.7	18	19	20	21	22	23	24	25	26	27
*	0	P	a	R	S	T	J	V	W	W+1	W+2	W+3	W+4	W+5	W+6	W+7	W+8	W+9	W+10
**	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
*	W+11	W+12	W+13	W+14	W+15	W+16	W+17	W+18	W+19	W+20	W+21	W+22	W+23	W+24	W+25	W+26	W+27	W+28	W+29
**	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65
*	W+30	W+31	W+32	W+33	W+34	W+35	W+36	W+37	W+38	W+39	W+40	W+41	W+42	W+43	W+44	W+45	W+46	W+47	W+48
**	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84
•	W+49	W+50	W+51	W+52	W+53	W+54	W+55	W+56	W+57	W+58	W+59	W+60	W+61	W+62	W+63	W+64	W+65	W+66	W+67
**	85	86	87	88	89	90	91	92	93	94	100	101	102	103	104	105	106	107	108
*	W+68	W+69	W+70	W+71	W+72	W+73	W+74	W+75	W+76	W+77	W+78	W+79	W+80	W+81	W+82	W+83	W+84		
••	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125		

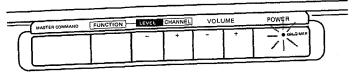
\* : Regular cable channel designations

\*\* : Your TV set's corresponding on-screen CABLE channel numbers

Note: Reception of channel A-5 ("95" of the TV set's on-screen CABLE channel numbers) is not recommended for your TV set.

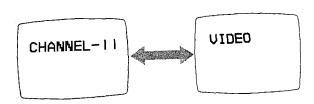
# **Basic Operating Procedure**

Press POWER button 1 on either the Remote Control or front panel. POWER/ON TIMER indicator 2 lights. Press this button again to turn power off.

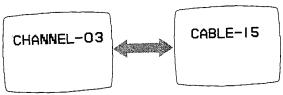


Note: If the POWER/ON TIMER indicator remains lit even after the power is turned off, it shows the ON TIMER is in operation. See "5. SET ON TIMER" on page 14 and "7. HOME SITTER" on page 16.

Press TV/VIDEO button (6) on the Remote Control (or the FUNCTION and LEVEL/CHANNEL (-/+) buttons on the front panel) to select the TV mode.



Press ANT/CABLE button on the Remote Control to select the broadcast mode. Each time it is pressed, the mode is switched between "CHANNEL" and "CABLE". When connected to an antenna, select "CHANNEL" mode for normal VHF/UHF reception. When connected to cable TV, select "CABLE" mode. The on-screen display will show the following:



Note: For mode selection using the front panel controls, see "FUNCTION BUTTONS" on next page.

4 Select desired channel using CHANNEL (-/+) buttons @ on the Remote Control (or LEVEL/CHANNEL (-/+) buttons (4) on the front panel). Pressing the (+) button advances to higher channels, (-) button to lower channels.



- Note: Certain channels have been preset at the factory. It may be necessary to add or erase some channels in your areas. See "9. INITIAL SET-UP" on page 19 for presetting channels.
- Channels can be selected directly by using 10-Digit Keypad @ on the Remote Control. For example, if you select channel 5, just press "5", or press "0" first, then press "5". For cable channels of 3-digit numbers, use 100+ button 🕢 . For example, if selecting channel 120, press 100+ button first, then press "2", then "0". Also refer to the CABLE TV CHANNEL CONVERSION CHART on the left page.



Note: When a video source such as a VCR is connected to the antenna terminal to be viewed on Channel 3 (or Channel 4), sometimes channel selection may result in an unclear or distorted picture. In this case, re-select Channel 3 (or 4) by pressing "3" (or "4") of the 10-Digit Keypad and the picture will become clear.

Press VOLUME (-/+) buttons on either the Remote Control or front panel to adjust volume to your desired listening level. Pressing the (+) button will increase sound volume, the (-) button will decrease sound volume. The volume level is indicated on the screen by reference numbers (0 - 50) and by a bar scale, as shown.



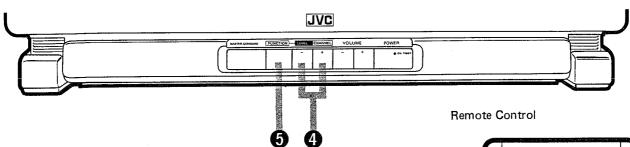
Note: The volume level can be muted instantly by pressing MUTE button @ on the Remote Control. See "MUTE Button" on page 21.

### On-Screen Display

- Once the on-screen display appears on the screen, it disappears in a few seconds. (Only the clock time can be kept displayed on the screen. See "DISPLAY Button" on page 21.)
- When tuned to a channel where no program is being broadcast, the on-screen display may be unclear or blurred.
- On-screen displays are available in two different layouts (except for displays of the channel number and clock time). See "9. INITIAL SET-UP" on page 19 for selecting the display mode.
- Channel numbers of the "CHOICE channels" can be displayed with their station call letters. If you prefer to do so, enter the station call letters when you program the "CHOICE channels". See "1. CHOICE PROGRAMING" on page 10.

# FUNCTION BUTTONS

Front Panel



The FUNCTION button on the front panel selects the control modes for TV operation and picture/sound adjustment.

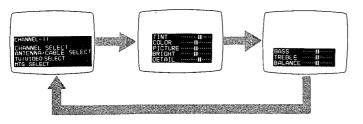
 Press FUNCTION button on the front panel. The first time it is pressed, the following display appears on the screen.



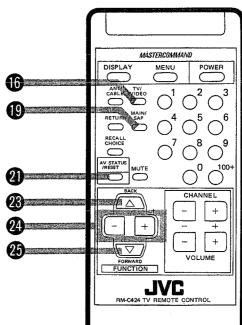
At this time, the top line shows the current channel number.

Press FUNCTION button **5** to select the desired item for adjustment. Each time the FUNCTION button is pressed, the magenta-colored portion shifts in the order below to show that the colored item in the list can be adjusted.

Note: Three pages of on-screen displays are available with the FUNCTION button.



- 1 CHANNEL SELECT mode -
- 2 ANTENNA/CABLE SELECT mode
- 3 TV/VIDEO SELECT mode
- 4 MTS SELECT mode
- 5 TINT adjustment mode
- 6 COLOR adjustment mode
- 7 PICTURE adjustment mode
- 8 BRIGHT adjustment mode
- 9 DETAIL adjustment mode
- 10 BASS adjustment mode
- 11 TREBLE adjustment mode
- 12 BALANCE adjustment mode



Note: The Remote Control's FUNCTION BACK button or FORWARD button selects only picture and sound adjustment modes: TINT, COLOR, PICTURE, BRIGHT, DETAIL, BASS, TREBLE and BALANCE. The other control modes can be selected directly with the Remote Control's respective buttons. Pressing FUNCTION FORWARD button advances the colored portion in the order as shown on the left for "picture/sound adjustment modes", pressing FUNCTION BACK button advances in the reverse order.

After selecting the desired mode, press LEVEL/CHANNEL (-/+) buttons ① on the front panel or FUNCTION (-/+) buttons ② on the Remote Control while the selected mode indication is being displayed to make your preferred adjustment. The Remote Control's FUNCTION (-/+) buttons ② control only picture and sound adjustments.

- When using the front panel buttons, before the FUNCTION button is pressed for the first time with nothing displayed on the screen, the TV is in the "CHANNEL SELECT" mode. Therefore, in this mode, channel selection is possible by pressing LEVEL/CHANNEL (-/+) buttons (4) on the front panel.
- After completing picture and sound adjustments from the Remote Control, selecting either FUNCTION (-) or (+) button will return directly to the last chosen adjustment mode.

# 1 CHANNEL SELECT mode

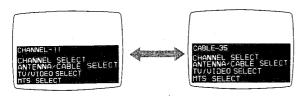
In this mode, press LEVEL/CHANNEL (+) button ② on the front panel to scan up the channel, and press the (-) button to scan down the channel.

(The screen illustrations below show the case when the TV is in the "CHANNEL" mode. When in the "CABLE" mode, the "CABLE" indication appears instead of "CHANNEL".)



# 2 ANTENNA/CABLE SELECT (broadcast) mode

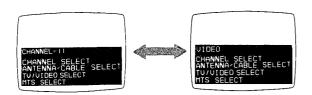
In this mode, press LEVEL/CHANNEL (-/+) buttons **4** on the front panel to change the broadcast mode between "CHANNEL" (for regular VHF/UHF channels) and "CABLE" (for cable channels).



# 3 TV/VIDEO SELECT mode

In this mode, press LEVEL/CHANNEL (-/+) buttons ② on the front panel to switch the mode between "TV" (for offair or cable TV broadcasts) and "VIDEO" (for video source which is connected to the TV set's VIDEO/AUDIO INPUT connectors or S-VIDEO IN connector). See "CONNECTING TO EXTERNAL EQUIPMENT" on page 22.

Note: Mode selection can be performed with TV/VIDEO button (6) on the Remote Control.



## 4 MTS SELECT mode

Your TV set incorporates an MTS (Multichannel Television Sound) decoder to receive stereo broadcasts and any accompanying SAP (Second Audio Program), such as a bilingual broadcast.

Available sound will be:

- (1) Monaural (MAIN) audio program (regular broadcasts)
- (2) STEREO (MAIN) audio program
- (3) Second Audio Program (SAP)

In this mode, the "← ON AIR" shows that the MTS mode is now being broadcast. Press LEVEL/CHANNEL (-/+) buttons 4 to change the reception mode among "STEREO", "SAP" and "MONO".

Each time it is pressed, the color of the indication changes from blue to magenta to show that the mode has just been switched.



### Notes:

- Mode selection can be performed with MAIN/SAP button 

   Each time it is pressed, the mode changes in the order of "STEREO" "SAP" "MONO" "STEREO".
- If the TV set is kept always set to the stereo mode, when a stereo broadcast is received, stereo sound is output automatically.
- If the received stereo signal is weak, noise may be heard.
   In such a case, press LEVEL/CHANNEL (-/+) buttons
   (or MAIN/SAP button ) to engage the MONO mode for better sound reception.
- If the received SAP signal is weak, the SAP will not be heard. Select the MONO mode for better sound reception.
- Even if both stereo and SAP broadcasts are received, both broadcasts cannot be heard at a time.

### When using the TV set for cable reception

Transmission of Cable TV signals may differ from off-air TV broadcasts. It is possible that the multichannel TV sound (MTS) may not be received satisfactorily.

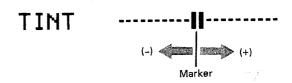
## [5]- [12] Picture/sound adjustment modes

In these modes, an adjustment scale with a marker appears on the screen. Press LEVEL/CHANNEL (-/+) buttons on the front panel or FUNCTION (-/+) buttons on the Remote Control to fine adjust each item to your preference according to the chart below. (The center position is only a reference level, rather than a standard setting.)

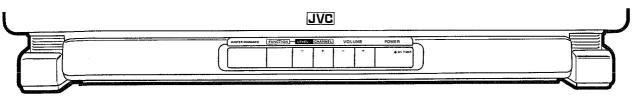
(-)	LEVEL	(+)		
Reddish	TINT	Greenish		
Subdued	COLOR	Vivid		
Light	PICTURE	Strong		
Dark	BRIGHT	Bright		
Soft	DETAIL	Sharp		
Soft	BASS	Strong		
Soft	TREBLE	Strong		
Left	BALANCE	Right		

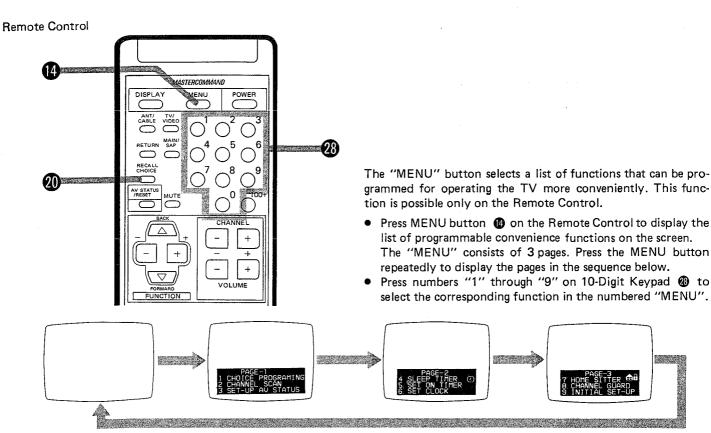
Note: When you wish to restore all adjustment modes to their scales' center positions, use AV STATUS/RESET button

on page 13.



### Front Panel





### PAGE-1

### 1. CHOICE PROGRAMING

nels as "CHOICE channels", allowing immediate, direct access to the channel of your choice using RECALL CHOICE button @ .

- 1) While in the channel select mode (either "CHANNEL" or "CABLE" mode), determine the channel you wish to preset as a CHOICE channel and display it on the screen. (For example, press "0" and "9" to display "CHANNEL 09").
- 2) With "PAGE-1" MENU displayed on the screen, press "1" of 10-Digit Keypad 28 . The display will show:

TO SET CHOICE NO

CHOICE channel number you wish to preset. Then, the following display will appear.

(For example, press "1" for storing "CHANNEL 09" as the "CHOICE 1" channel.)





for handy reference along with its channel number. (Up to 4 letters can be stored.) If you choose to store the call letters, press "1". The following display will appear.



If you choose not to store call letters, press "2" of the 10-Digit Keypad. The CHOICE LIST will appear to show that the CHOICE PROGRAMING mode has been disengaged.

4) With this display, you can store the TV station's call letters 5) Press the FUNCTION FORWARD/BACK buttons for selecting each of the call letters to be stored. Available characters include the alphanumeric characters (26 English-language letters and 10 numerals), plus various punctuation marks (period, comma, etc.). Then, move the cursor to the next letter position by pressing the FUNCTION (-/+) buttons on the Remote Control. When finished selecting up to 4 call letters, press "1".

(For example, if you store the letters "JVC", keep the FUNCTION FORWARD or BACK button pressed until the letter "J" appears. Then, press the FUNCTION (+) button to move the cursor one letter position to the right. Press FUNC-TION FORWARD or BACK to select the letter "V", then move the cursor to the right again with FUNCTION (+). In the same way, select "C", then press "1" to end the opera-

The CHOICE LIST is displayed for a few seconds.



6) Repeat steps 1) through 5) to preset up to 5 CHOICE chan-

### RECALL CHOICE Button

• Simply press RECALL CHOICE button @ anytime you want to call up the list of preset CHOICE channels for convenient direct CHOICE channel selection. While the list is on the screen, press the corresponding num-channel.



# 2. CHANNEL SCAN

This feature allows automatic scanning, in ascending order, of the channels which have been stored following the procedures of "9. INITIAL SET-UP" (described on page 19).

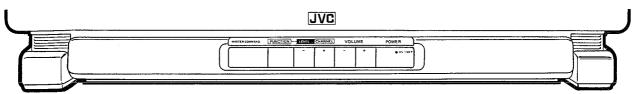
- 1) With "PAGE-1" MENU displayed on the screen, press "2" of 10-Digit Keypad 🚳 .
  - All memorized channels (either "CHANNEL" or "CABLE" mode) will now be scanned sequentially in ascending order beginning with the channel that the TV is tuned to. Scanning will stop automatically when the original channel is reached. "SCAN STOP" appears to show the CHANNEL SCAN mode has finished.



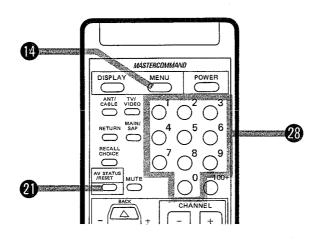
- 2) Press any button on the Remote Control, if you wish to stop scanning at a certain channel before the original channel is reached.
  - To resume scanning, press MEMU button @ and then "2" of 10-Digit Keypad @ .

- When the TV is in the "CABLE" mode, the "CABLE" indication appears on the screen instead of "CHANNEL".
- For changing memorized channels, see "9. INITIAL SET-UP".
- If you wish to start CHANNEL SCAN at a specific channel, first select the broadcast mode (CHANNEL or CABLE) then that channel number, and then follow instructions on the left.
- While actual CHANNEL SCAN is being performed, all front panel buttons become inoperable.

### Front Panel



### Remote Control



### 3. SET-UP AV STATUS

Your TV set incorporates the AV STATUS memory that can store 2 variations for preset picture/sound adjustments, allowing you to change the picture/sound tone/speaker balance to your preference, depending on each source.

1) With "PAGE-1" MENU displayed on the screen, press "3" of 10-Digit Keypad 3. The display will show:



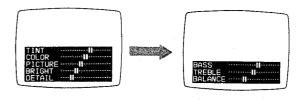
2) Make picture adjustments to your preference. Use the FUNCTION BACK/FORWARD buttons to select the item, and use the FUNCTION (-/+) buttons to adjust each item. If you also wish to make sound adjustments, press "1" to advance the adjustment mode display. The following display will appear. (Press "1" again to return to the picture adjustment display.)



3) Make sound adjustments to your preference. Use the FUNCTION BACK/FORWARD buttons to select the item, and use the FUNCTION (-/+) buttons to adjust each item. When finished, press "2". The following display will appear.



4) Press "1" to store the setting as the "AV STATUS A". (Press "2" to store it as the "AV STATUS B".) Then the picture and sound adjustment settings (items and their reference scales) appear for a few seconds each.



Repeat steps 1) through 4) for making another AV STATUS setting.

Note: When you wish to choose the preset AV STATUS, just press the AV STATUS/RESET button 10 to choose either set of AV STATUS adjustments. For details, see "AV STATUS/RESET Button" on the next page.

### AV STATUS/RESET button

Use this button for choosing the preset AV STATUS or for resetting the picture/sound adjustment items.

Press AV STATUS/RESET button ② on the Remote Control. The following display appears.



 Another pressing of the AV STATUS/RESET button resets all previously adjusted items to their center positions.

### 1. AV STATUS A

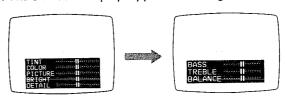
Press "1" of 10-Digit Keypad for selecting AV STATUS A. The picture and sound change as preset for "AV STATUS A". Then the picture and sound adjustment settings (items and their reference scales) appear for a few seconds each.

### 2. AV STATUS B

Press "2" for selecting AV STATUS B. The picture and sound change as preset for "AV STATUS B". Then the picture and sound adjustment settings (items and their reference scales) appear for a few seconds each.

### 3. RESET

Press "3" when you wish to reset all adjusted items (TINT, COLOR, PICTURE, BRIGHT, DETAIL, BASS, TREBLE and BALANCE) back to their center positions at the same time. The on-screen displays appear and change as follows.



Note: While in this mode, the setting of the AV STATUS cannot be cancelled.

### PAGE-2

### 4. SLEEP TIMER

The "SLEEP TIMER" feature allows you to turn off your TV automatically at a preset time.

1) With "PAGE-2" (or "PAGE-1" or "PAGE-3") MENU displayed on the screen, press "4" of 10-Digit Keypad 
The display will show:



 If the built-in clock has not been set to operate properly, the SLEEP TIMER will not function. In this case, the following display will appear on the screen to show that the clock requires adjustment.



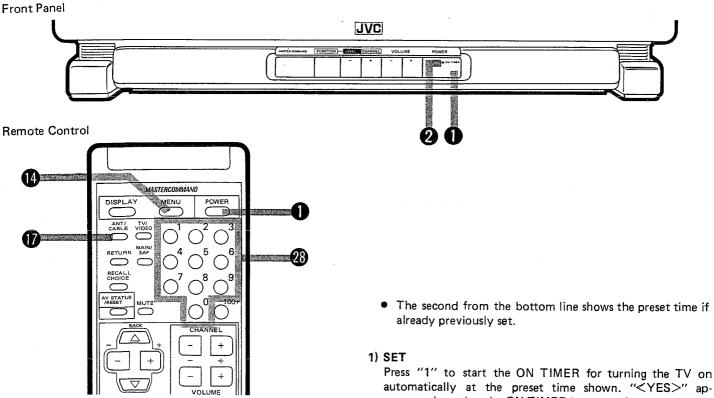
Press "1" (YES) of the 10-Digit Keypad to adjust the clock. (If "2" (NO) is pressed, the warning message "YOU CANNOT OPERATE SLEEP TIMER!!" is displayed.)

Set the built-in clock. (See "6. SET CLOCK" on page 15 for details.) When the clock is adjusted, the message "THANK YOU" appears. Then, the following display appears to show that the SLEEP TIMER is now ready to be set.



- 2) Press the numbers on the 10-Digit Keypad to set the desired switch-off time. The SLEEP TIMER can be set for up to 11 hours 59 minutes from the current time.
  - For example, if it is now 7:00 PM, and you want the TV to switch off automatically at 9:00 PM, press "9", "0" and "0". (The "AM/PM" setting is done automatically.) The selected time of "9:00 PM" appears.
- When you select "1" for hour setting (for example, "1:05 AM"), remember to press "0" first, then press "1", "0" and "5".
- 3) To cancel the SLEEP TIMER setting, key in the current time (the current time setting of the TV's built-in clock).

- If an invalid time is selected (for example: "5:87"), it will be rejected and the SLEEP TIMER must be reset properly.
- While the SLEEP TIMER is activated, if the POWER button is pressed to turn the power off and on again, the SLEEP TIMER will be cancelled.
- While the SLEEP TIMER is activated, if the power is disconnected (such as in the case of power failure,etc.) and reapplied later, the TV is turned off. When disconnected only for a couple of minutes, the SLEEP TIMER is reactivated; however, it turns the TV off later than the set time by the amount of time of interruption.
- The SLEEP TIMER may turn off the TV a little earlier than the preset time.
- When the remaining time reaches 1 minute, the message, "GOOD NIGHT", will be displayed and continue to blink until the power turns off automatically.



## 5. SET ON TIMER

The "ON TIMER" feature allows you to turn on your TV automatically at a preset time and on a specific channel. The ON TIMER is available for 2 different settings.

With "PAGE-2" (or "PAGE-1" or "PAGE-3") MENU displayed on the screen, press "5" of 10-Digit Keypad @ . The display will show:



At this time, if the display of "POWER INTERRUPTED/ WOULD YOU SET CLOCK FIRST?" (which may appear during the SLEEP TIMER procedure) appears, it shows that the clock is not operating, and the ON TIMER will not func-

Press "1" (YES) to set the clock. (If "2" (NO) is pressed, the warning message "YOU CANNOT OPERATE ON TIMER!!" is displayed.)

Set the clock. See "6. SET CLOCK" on page 15 for details regarding clock setting. After the clock has been set, the message "THANK YOU!!" appears to show that the clock has just been adjusted and the ON TIMER is now ready to be set.

Two different settings are possible. Press "1" or "2" to select the setting position. The display will show:



The second from the bottom line shows the preset time if

automatically at the preset time shown. "<YES>" appears to show that the ON TIMER has started.

### 2) CANCEL

Press "2" to cancel the setting. "<NO>" appears to show that the ON TIMER has been cancelled.

### 3) CHANGE

Press "3" to re-adjust the setting. Then, the following display appears.



Press the numbers on the 10-Digit Keypad to set the desired switch-on time. For example, if you want the TV to switch on automatically for CHANNEL 12 at 7:00 AM, press, "7", "O" and "O". (When you select "1" for hour setting, remember to press "0" first, then press "1".) The selected time of "7:00" appears and immediately the display changes to:



Then, press "1" to select the "AM" setting. (Press "2" to select the "PM" setting.) Then, the following display appears. Press "1" and "2" for specifying "CHANNEL 12".



Now the following display appears on the screen to show the ON TIMER is set to "7:00 AM, CHANNEL 12" with the < YES > indicating the ON TIMER has started. Finally, press POWER button 1 to turn the power off. POWER/ON TIMER indicator 2 remains lit to show that the ON TIMER is in operation.



### Notes:

- If an invalid time is selected (for example: "17:70"), it will be rejected and the ON TIMER must be reset properly.
- First select the broadcast mode (CHANNEL or CABLE) of the channel you wish to set for the ON TIMER with ANT/CABLE button on the Remote Control before entering the ON TIMER mode, since broadcast mode switching while in the ON TIMER will cancel the mode.
- After the ON TIMER has been properly set, it functions only once for each setting (up to 2 settings are possible) to turn on the TV's power. (It does not operate repeatedly every day at the same time as a serial timer.)
- Once the ON TIMER turns the TV on automatically, if the TV is not operated in any way, after 2 hours the TV will turn off automatically for safety. A single adjustment, even audio level adjustment or channel selection, will cancel this switch-off function.
- While the ON TIMER is activated, if the power is disconnected (such as in the case of power failure, etc.) and reapplied later, the ON TIMER is cancelled. When disconnected only for a couple of minutes, the ON TIMER is reactivated; however, it turns the TV on later than the set time by the amount of time of interruption.
- If the channel which has already been set as a "Guarded Channel" is selected, that channel is rejected and cannot be set for the ON TIMER. (For details of the Guarded Channels, refer to page 17.)

# 6. SET CLOCK

Your TV has a built-in clock. Set the clock as follows.

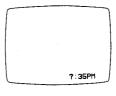
1) With "PAGE-2" (or "PAGE-1" or "PAGE-3") MENU displayed on the screen, press "6" of 10-Digit Keypad ② . The display will show:



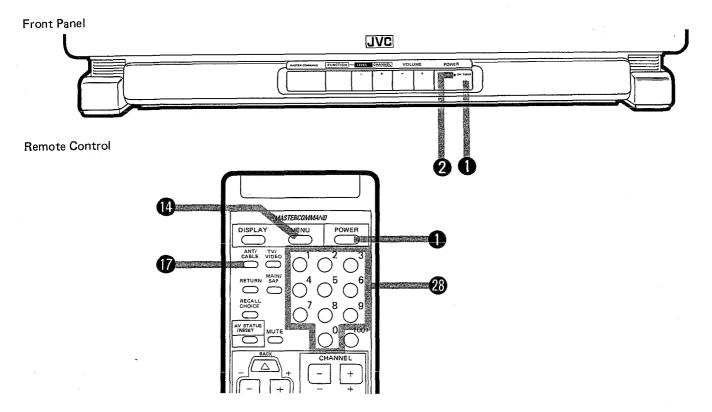
2) Then, press the numbers (be sure to key in 4 digits) on the 10-Digit Keypad to set the current time. For example, if the present time is 7:35 PM, press, "7", "3" and "5". Then, the display changes to:



3) Press "2" to select the "PM" setting. (Press "1" to select the "AM" setting.) Then, the display changes to the following to show the current time is set and the clock starts operating.



- If an invalid time is selected (for example: "17:70"), it will be rejected and the built-in clock must be reset properly.
- If you wish to set the clock precisely, in step 3) above, press
   "2" (or "1") at the same instant of a time signal.
- The built-in clock may loose time depending on the manner in which the TV is used or the frequency of the power source.
   If the time difference becomes great, re-adjust the clock.
- If the power is disconnected (such as in the case of a power failure, etc.), and reapplied later, the clock will stop operating. (The clock status can be checked on screen. Press the DISPLAY button. If the clock has stopped, the message "CLOCK STOPPED" is displayed instead of the current time. See "DISPLAY Button" on page 21 for details.) When disconnected only for a couple of minutes, the clock is reactivated; however, it will be later than the actual time by the amount of time of interruption.



### PAGE-3

### 7. HOME SITTER

The "HOME SITTER" feature enables the TV to be turned on and off automatically at preset times every day.

With "PAGE-3" (or "PAGE-1" or "PAGE-2") MENU displayed on the screen, press "7" of 10-Digit Keypad 

The display will show:



 At this time, if the display of "POWER INTERRUPTED/ WOULD YOU SET CLOCK FIRST? appears, it shows that the clock is not operating, and the HOME SITTER will not function.

Press "1" (YES) to set the clock. (If "2" (NO) is pressed, the message "YOU CANNOT OPERATE HOME SITTER!!" is displayed.)

Set the clock. See "6. SET CLOCK" on the previous page for details regarding clock setting. After setting the clock, the message "THANK YOU!!" appears to show that the clock has just been adjusted and the HOME SITTER is now ready to be set.

### 1) SET

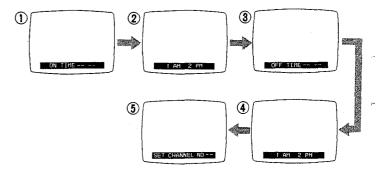
Press "1" to place the HOME SITTER in standby. The ON/OFF time and channel number which have been previously set will be displayed. When POWER switch 1 is pressed to turn the TV off, POWER/ON TIMER indicator 2 lights and "YES" appears on the screen to show that the HOME SITTER is in operation.

### 2) CANCEL

Press "2" to cancel the HOME SITTER. "NO" appears to show that the HOME SITTER has been cancelled.

### 3) CHANGE

Press "3" to re-adjust the HOME SITTER setting. Follow the on-screen displays to set the switch-on time, switch-off time and channel number, using the 10-Digit Keypad.



- ① Set the switch-on time.
- 2 Select "AM" or "PM".
- 3 Set the switch-off time.
- 4 Select "AM" or "PM".
- (5) Set the channel number.

When the channel number is set, the display will show:



 This display shows that the HOME SITTER is set to switch the TV on at 6:30 PM, switch it off at 11:00 PM and the channel to be received is "CABLE 13".

### Notes:

- If an invalid time or channel number is selected, it will be rejected and it must be reset properly.
- First select the broadcast mode (CHANNEL or CABLE) of the channel you wish to set for the HOME SITTER with ANT/CABLE button on the Remote Control before entering the HOME SITTER mode, since broadcast mode switching while in the HOME SITTER will cancel the mode.
- If you wish to reset the switch-on time only, stop keying in data (waiting until the on-screen display disappears) after keying in the AM/PM setting, or press keys other than 10-Digit Keypad. And, if you wish to reset the switch-on and switch-off time only, the procedure is the same.
- The function that automatically turns the TV off for the ON TIMER, if no TV operation is performed after 2 hours, does not operate for the HOME SITTER.
- If the power is disconnected (such as in a power failure, etc.), and reapplied later, the HOME SITTER will be cancelled. When disconnected only for a couple of minutes, the HOME SITTER is reactivated; however, it turns the TV on and off later than the set time by the amount of time of interruption.
- If the channel which has already been set as a "Guarded Channel" is selected, that channel is rejected and cannot be set for the HOME SITTER. (For details of the Guarded Channels, see below.)

# 8. CHANNEL GUARD

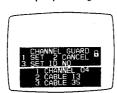
The "CHANNEL GUARD" feature allows you to assign an "ID number" to specific channels of your choice, making them "Guarded Channels". This prevents these specific channels from being selected, unless the "ID number" is keyed in.

First select a channel you wish to set as a Guarded Channel. With "PAGE-3" (or "PAGE-1" or "PAGE-2") MENU displayed on the screen, press "8" of 10-Digit keypad 

The display will show:



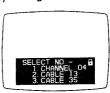
Then, press "0". The display changes to:



 Channel numbers displayed are the Guarded Channels, if already previously set.

### 1) **SET**

Press "1". The display changes to:



For example, if the current channel being received is "CHANNEL 25", and you wish to store this channel as Guarded Channel 1, then press "1". The display changes to show that CHANNEL 25 is now set as Guarded Channel 1.



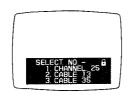
Continued on next page



# Remote Control MASTERCOMMAND DISPLAY MENU POWER ANT TV/ CARLE VICEO 1 2 3 RETURN SAP 4 5 6 RECALL R

### 2) CANCEL

Press "2" to cancel the Guarded Channel. The display will show:



With this display on the screen, press the number of the Guarded Channel you wish to cancel from the list. For example, if you wish to cancel CHANNEL 25 (in this case, Guarded Channel 1) from the list, press "1". Then the display changes to show that CHANNEL 25 (Guarded Channel 1) has been cancelled.



### 3) SET ID NO.

Press "3" to set the ID number. The display will show:



Press any 3 digits you wish to be the ID number. When completed, "ENTERED" appears to show that the ID number you have just keyed in is set.

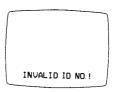


### Viewing Guarded Channels

1) Select the Guarded Channel. (If the Guarded Channel you wish to view is CHANNEL 25, press "2" and "5".) Then, the following display appears:



- 2) Key in the ID number using the 10-Digit Keypad. The channel appears.
- 3) If the keyed-in ID number is incorrect, the display shows:



And the Guarded Channel you have selected cannot be seen.

- If you wish to change the ID number, follow the steps of "3) SET ID NO.".
- If the power is disconnected (such as in the case of power failure, etc.), and reapplied later, the ID number is reset to "000".
- When performing the CHANNEL SCAN function, or selecting channels using CHANNEL (-/+) buttons , the Guarded Channels are skipped.
- In the following cases, the Guarded Channel can be seen without keying in the ID number:
  - =When you press RETURN button 
     from a channel which has been selected immediately after viewing a Guarded Channel
  - =When you press ANT/CABLE button **17** from a channel of a different broadcast mode (CHANNEL or CABLE) which has been selected immediately after viewing a Guarded Channel
  - =When you press CHANNEL (-/+) buttons ② on the Remote Control or LEVEL/CHANNEL (-/+) buttons ③ on the front panel, while in the MANUAL PROGRAM mode of the INITIAL SET-UP (on MENU PAGE-3), if the selected channel which has already been ADDed happens to also be a Guarded Channel.
  - =When you press "4" (CHANNEL UP) or "5" (CHANNEL DOWN) of the 10-Digit Keypad while in the MANUAL PROGRAM mode of the INITIAL SET-UP, if the Guarded Channel happens to also be the next higher or lower channel following the one to which you are presently tuned.
  - =While in the AUTO PROGRAM mode of the INITIAL SET-UP, if the AUTO PROGRAM is interrupted immediately when a Guarded Channel appears.
  - =When the channel which has already been set for the ON TIMER or HOME SITTER is set as a Guarded Channel.
- If you forget the ID number which you have set, reset it.

## 9. INITIAL SET-UP

The INITIAL SET-UP feature allows you to perform basic settings for the TV status. This consists of Channel Memory (Auto/ Manual), Message Style and Noise Mute.

Note: When performing Channel Memory (MANUAL PRO-GRAM), select an appropriate broadcast mode (either "CHANNEL" or "CABLE") before you select the INITIAL SET-UP mode.

With PAGE-3 (or PAGE-1 or PAGE-2) MENU displayed on the screen, press "9" of 10-Digit Keypad 3 . The display will

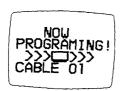


Press appropriate 10-digit key to select the item.

### 1) AUTO PROGRAM

This function allows memorizing the channels automatically to match the TV broadcasts and cable channels of your area. The memorized channels can be selected by CHANNEL (-/+) buttons 
on the Remote Control or LEVEL/CHANNEL (-/+) buttons 1 on the front panel, or in the CHANNEL SCAN mode, while skipping channels where there are no broadcasts.

Press "1" of the 10-Digit Keypad. The following display will appear and the program set-up procedure begins automatically.



When tuned to a channel in which a TV program is broadcast, the following display appears and this channel is memorized.



When the AUTO PROGRAM procedure (scanning and memorizing) is completed, it will be indicated by the following display.



### Notes:

- If the broadcast signals are weak, the channel may not be memorized. In this case, perform the MANUAL PROGRAM
- The AUTO PROGRAM procedure takes approximately 4 minutes. If you wish to stop this procedure before completion, press any button on the remote control.

### 2) MANUAL PROGRAM

Similar to the AUTO PROGRAM function on the left, this is for memorizing channels, but it is performed manually. The resulting Manual Programing is also effective when performing up/ down channel selection or CHANNEL SCAN.

Press "2". The display will show:



The current tuned-in channel

Simply follow the on-screen instructions.

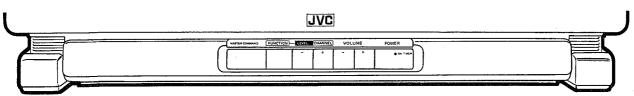
Note: First select the broadcast mode before entering this MANUAL PROGRAM mode.

- 1) Press "1" (ADD) to add this channel in memory. A bar "-" will appear between the broadcast mode (CHANNEL or CABLE) and the channel number to show that the channel has been memorized.
- 2) Press "2" (ERASE) to erase this channel from memory, if you do not wish to preset it in memory or if no TV station is broadcasting on it. The bar between the broadcast mode and channel number will disappear.
- 3) Press "4" (CHANNEL UP) or "5" (CHANNEL DOWN) to select the next higher or lower channel.
- 4) Press "3" (END) when you have stored all required channels
- 5) When you wish to store channels of the other broadcast mode, select the mode first, then repeat steps 1) through 4).
  - In step 3) above, if selecting channels is difficult, press the CHANNEL (-/+) buttons on the Remote Control.
  - Be sure to perform these operations using the Remote Control.

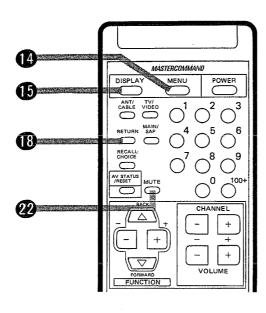
Continued on next page



### Front Panel







### 3) MESSAGE STYLE

This function is for switching the black background of the onscreen display on and off (except for channel numbers and clock time.) Press "3". The display will show:



Press "1" to select the on-screen display mode with a black background.



(VOLUME indication)

Press "2" to select the on-screen display mode without a black background.



(VOLUME indication)

### 4) NOISE MUTE

The NOISE MUTE feature allows replacing the "snowy" screen of vacant non-broadcast channels with a blue-blank screen; and, at the same time, muting the noisy sound.

Press "4". The display will show:



Press "1" to select the Noise Mute mode for a blue-blank screen with no sound.

Press "2" to release the mode. Screen is normal (without blue-blank screen) and sound can be heard.

Note: The Noise Mute mode can be activated only when either no signal is being input or when a weak signal is being received.

- If you wish to view a TV program having a weak broadcast signal, release the Noise Mute mode to prevent it from being activated.
- If you use an antenna system, before adjusting it (extending, rotating, etc.), release the Noise Mute mode to prevent it from being activated when the signal condition changes.
- When playing back VCR recordings or the like, picture and sound muting conditions might continue to occur for a few seconds after engaging the Play mode. Release the Noise Mute mode when necessary.
- When the Noise Mute mode is engaged, it is also applied to the output signals, both from the LINE OUT connectors and from the AUDIO OUT (VARIABLE) connectors. Release the Noise Mute mode to prevent it from having effect when connecting external components to the TV.

# MASTER COMMAND SELF-DEMONSTRATION **FEATURE**

Your TV has a self-demonstration feature for the incorporated MASTER COMMAND system, demonstrating automatically all major functions of the MASTER COMMAND.

With PAGE-1 (or PAGE-2 or PAGE-3) MENU displayed, press "0" twice of the 10-Digit Keypad ("0-0"), or press the FUNC-TION and VOLUME (-) buttons on the front panel simultaneously. The demonstration automatically begins in the following order. If you wish to stop the demonstration anytime while it is running, press any key on the Remote Control or on the front



### Demonstration procedure

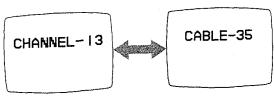
SET CLOCK\* Picture adjustment -RESET (picture adjustment) CHOICE PROGRAMING SET-UP AV STATUS SLEEP TIMER SET ON TIMER HOME SITTER CHANNEL GUARD MESSAGE STYLE .

\*The SET CLOCK mode can operate only when the built-in clock is stopped.

Note: Operating this function adjusts the clock, timer settings, and all other functions to specific demonstration settings. Therefore, re-adjustment of these settings is required once the demonstration has been executed.

### **RETURN Button**

Press RETURN button (1) on the Remote Control. The previously viewed channel will appear on the screen. Press RETURN again to switch back to the original channel. Repeatedly pressing RETURN switches between these two channels.

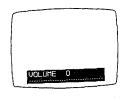


### **MUTE Button**

Press MUTE button ② on the Remote Control. The sound of the TV program being viewed will be reduced to zero and "VOLUME O" will appear on the screen.

Press again to restore the sound.

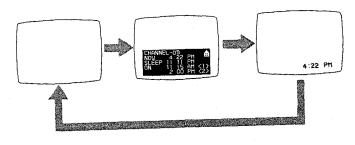
Note: Changing the audio volume or channel number also restores the sound.



### **DISPLAY Button**

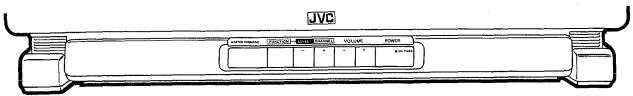
Press DISPLAY button (6) on the Remote Control. The channel number of the program you are now viewing, the SLEEP TIMER/ON TIMER settings, HOME SITTER settings, and the current time are displayed in the order as shown below by each pressing of the DISPLAY button. The current time remains displayed on the screen until the DISPLAY button is pressed again.

Note: If the SLEEP TIMER and/or ON TIMER and/or HOME SITTER is cancelled, their settings will not be displayed.

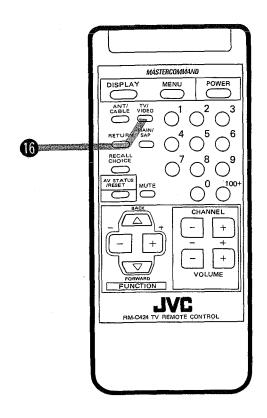


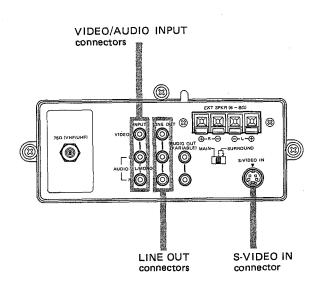
# CONNECTING TO EXTERNAL EQUIPMENT

Front Panel

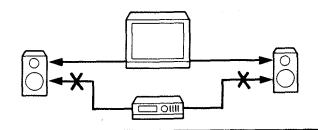


Remote Control





- Prior to making any connections to your TV set, be sure to turn the POWER off.
- For a more detailed understanding of each connection, it is recommended that you read the instruction manual for each connected component.
- If you use video or audio equipment placed too near the Monitor/Receiver, picture and/or sound may become distorted due to interference between these components. In such a case, separate each piece of equipment at a sufficient distance.
- The following shows examples for connecting external equipment.
- Do not connect another audio source to the same speaker to which the TV set is connected, otherwise damage may result to the amplifier of the TV set or to that of the other audio source.

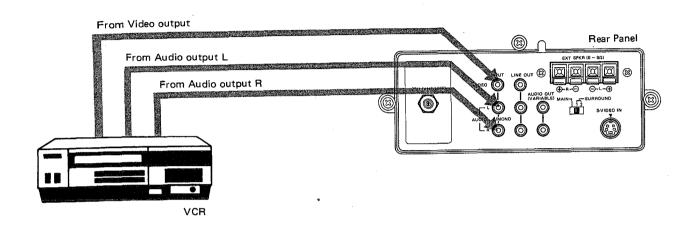


# 1 VIDEO/AUDIO INPUT connectors

 To view a connected video source, press TV/VIDEO button on the Remote Control to engage the VIDEO mode.

### Notes:

- If the connected video equipment outputs monaural audio, connect to the AUDIO L/MONO (left channel) connector. Sound will be output from both right and left speakers.
- When the S-VIDEO IN connector is used, this VIDEO INPUT connector function becomes inoperable.

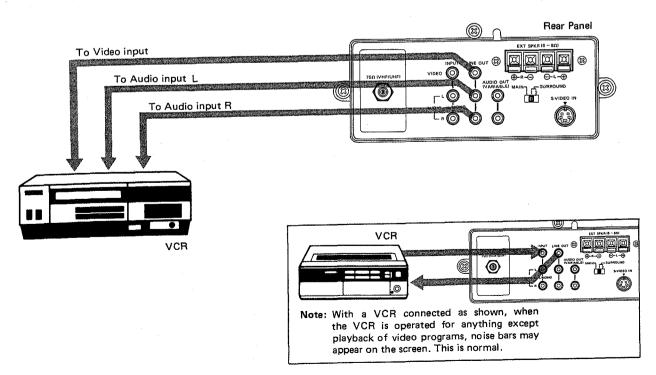


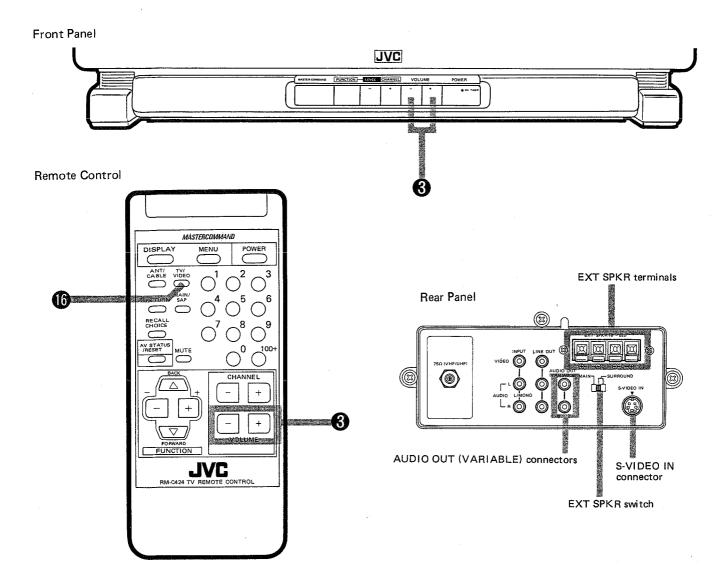
# 2 LINE OUT connectors

 The video and audio signals available at these connectors are the same as the source presently being monitored on the TV.

This is convenient for VCR connection.

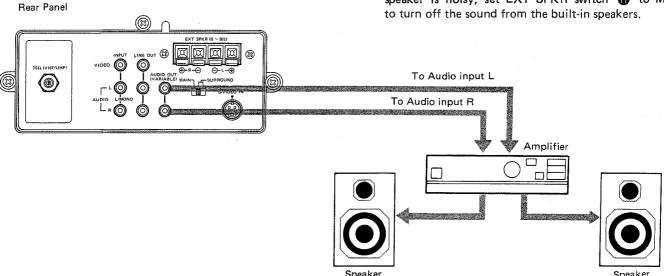
Note: Video signals that are input to the S-VIDEO IN connector cannot be output from the VIDEO connector of the LINE OUT connectors.





# 3 AUDIO OUT (VARIABLE) connectors

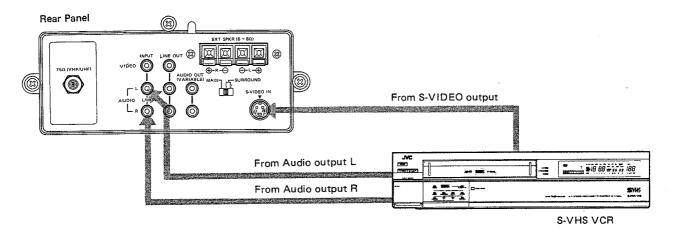
- The audio signals available at these connectors are the same as the audio source of the program being monitored on the TV screen.
- Connect a stereo amplifier to these connectors to listen to the sound through external speakers connected to the amp. The audio output level can be adjusted via VOLUME (-/+) buttons 3 on either the Remote Control or front panel.
- If the sound which is output from the TV's built-in speaker is noisy, set EXT SPKR switch to MAIN to turn off the sound from the built-in speakers.



### 4 S-VIDEO IN connector

- S-VIDEO IN connector is for the separated Y (luminance) and C (chrominance) video signals conforming to the NTSC system, ideal for connection of an S-VHS (Super VHS) VCR.
- Connect the audio output cable to AUDIO INPUT connectors.
- Press TV/VIDEO button (6) on the Remote Control to engage the VIDEO mode to view pictures from the S-VHS VCR.

Note: When equipment is connected to this connector, the VIDEO INPUT connector function becomes inoperable



### 5 Using external speakers

- Connect speaker cables while making sure that the wiring of speaker's polarities is correct.
- Set EXT SPKR switch to MAIN. The sound from the TV's built-in speakers is turned off, and the sound will be heard only from the speakers which are connected to EXT SPKR terminals .

(For "SURROUND 1" and "SURROUND 2" of EXT SPKR switch , refer to "6 Listening to surround sound" on page 26.)

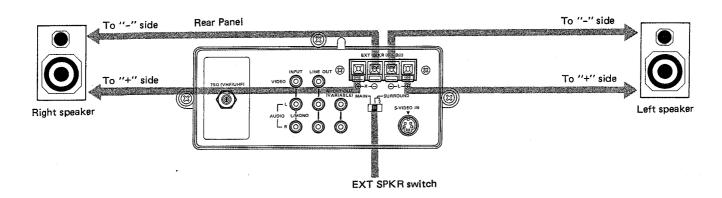
### < Setting the EXT SPKR switch >

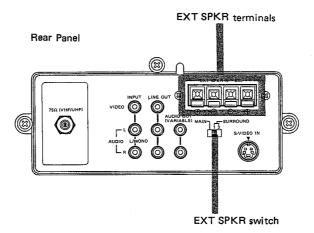
The output sound differs depending on the switch setting.

Switch	Sound output					
setting	Built-in speakers	Speakers connected to the EXT SPKR terminals				
MAIN	No sound	Normal sound				
SURROUND 1	No sound	Surround effect sound*				
SURROUND 2	Normal sound	Surround effect sound*				

<sup>\*</sup>Surround effect sound will be output when the sound source is stereo. No sound will be output when the sound source is monaural.

- Use speakers of 6-to 8-ohm impedance.
- If the "+" and "-" terminals are short-circuited, it may cause damage to the TV set.
- It is recommended to use magnetically shielded speakers.
   If you use speakers other than these, place them at a sufficient distance from the TV set, otherwise the magnetic field generated from such speakers cause unstable picture color.
- Do not connect another audio source to the same speaker to which the TV set is connected, otherwise damage may result to the amplifier of the TV set or to that of the other audio source.



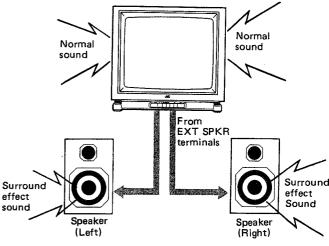


### 6 Listening to surround sound

"Surround sound" is a sound reproduction process resulting in a three-dimensional aural experience that is a combination of "surround effect sound" and "normal sound", delivered from both of left and right channels at the same time.

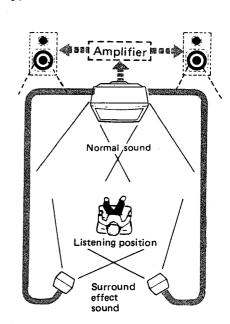
- The surround effect sound is possible only when the sound source being listened to is stereo. (In the case of monaural sound source, no sound from the speakers connected to the external speaker terminals will be output. Therefore, listening to surround sound is impossible.)
- Set the marker of the scale of the BALANCE adjustment mode to its center position using the FUNCTION button(s) and/or the AV STATUS/RESET button. See page 13.
- (A) When using an external stereo component system
- (1) Connect each component as illustrated.
- (2) Set EXT SPKR switch (1) to SURROUND 1.

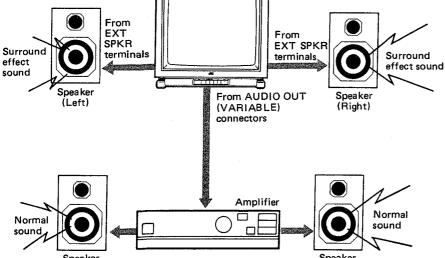
- (B) When connecting speakers to the EXT SPKR terminals
- (1) Connect speakers to the EXT SPKR terminals.
- (2) Set EXT SPKR switch (1) to SURROUND 2.



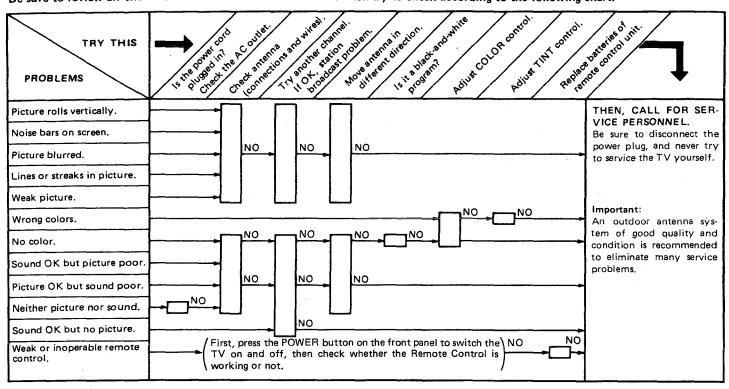
### Speaker positioning >

As shown below, position the speakers so that the normal sound can be heard in front and the surround effect sound can be heard in back of the listening position.





Be sure to review all the instructions written in this booklet. Then try to check according to the following chart.



Type

: Color monitor/receiver

Reception system

: NTSC system, BTSC system

(Multichannel sound)

Channel coverage

: VHF 2 - 13, UHF 14 - 69; Sub-Mid, Mid, Super, Hyper and Ultra

bands (180-channel frequency

synthesizer system) : AC 120 V, 60 Hz

Power requirement Power consumption

: Max. 147 W, Avg. 103 W

Screen size

: 27" diagonally measured, Full

Square

Audio output Speakers

: 3 W + 3 W

Antenna input terminal

: 3-3/16" x 4-3/4" ellipse x 2

: 75-ohm (VHF/UHF) terminal

(F-type connector)

External input terminals

: Video/1 Vp-p, 75 ohms

Audio/500 mV rms (-4 dBs), high

impedance

Line output terminals

: Video/1 Vp-p, 75 ohms

Audio/500 mV rms (-4 dBs), low

impedance (400 Hz when

modulated 100 %)

S-VIDEO IN terminal

: Y/1 Vp-p positive, 75 ohms

(negative sync provided)

C/0.286 Vp-p (burst signal), 75 ohms

Variable audio output

terminals

: More than 0 - 1550 mV rms

(+6 dBs), low impedance (400 Hz

when modulated 100 %)

External speaker terminals: Impedance 6 - 8 ohms

**External dimensions** 

 $(W \times H \times D)$ 

: 25-3/4" x 22-3/4" x 20-1/2"

Weight

Accessories

: 83.1 ibs

: Remote control unit (RM-C424) AA-size dry cell battery x 2

Design and specifications subject to change without notice.